

FIGURE 1

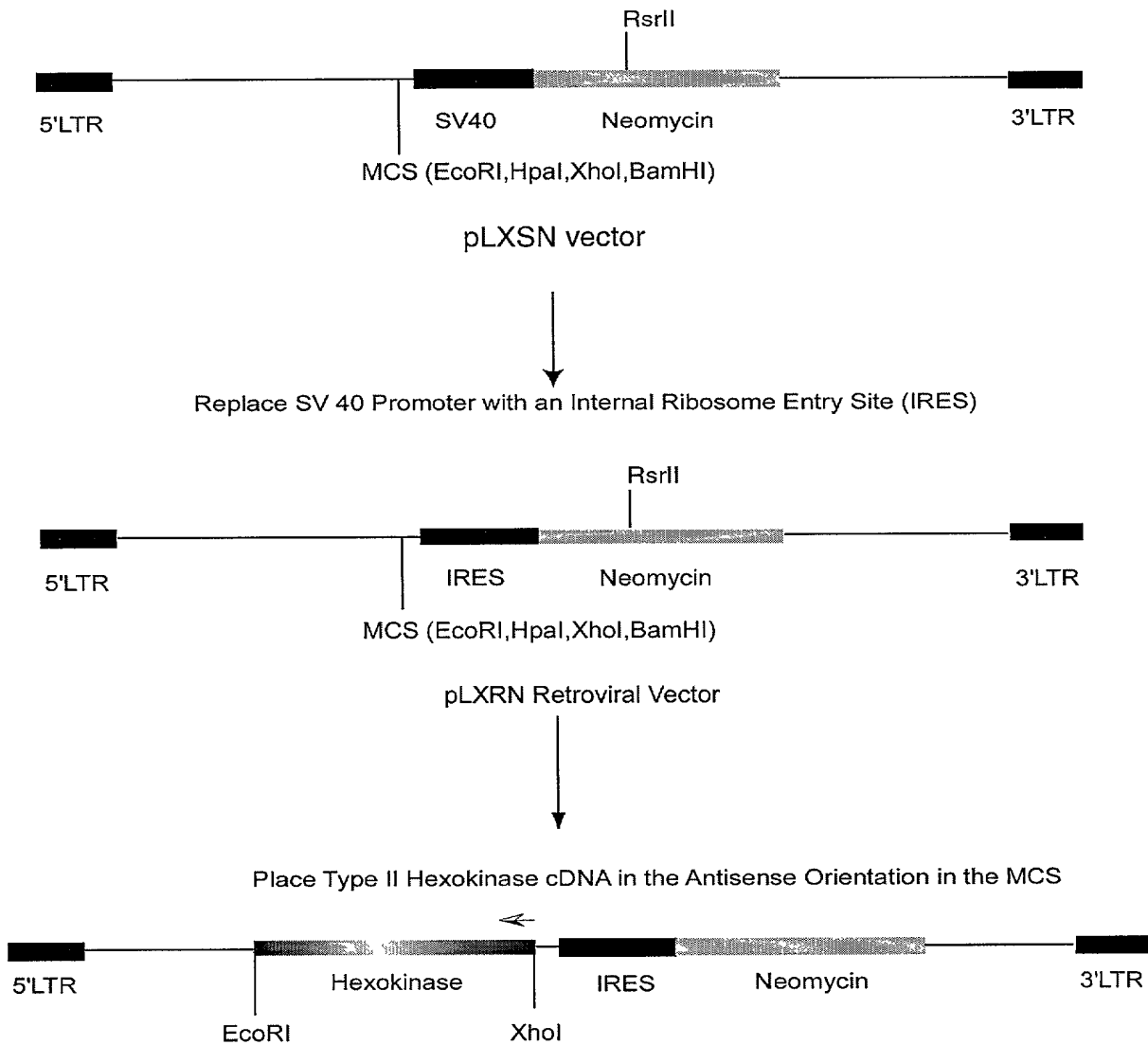


FIGURE 2



Legend:

— protein

Sequence:

1 MIASHMIACL FTELNNQVQ KVDQFLYHMR LSEDTLLEIS RFRKEMEKQ LGATTHTPTAA
61 VKMLPTFVRS TPDGTEHGEF LALDLGGTNF RVLRVVRTDN GLQRMENQ IYAILEDIMR
121 GSGTQLFDHI AECLANFMDK LQIKEKKLPL GFTFSFPCHQ TKLDESFLVS WTKGFKSSGV
181 EGRDVVDLIR KVIQRRGDFD IDIVAVVNDT VGTMTTCGYD QANCEIGLIV GTGSNACYME
241 EMRHIDMVEG DEGRMCINME WGAFGDDGTL NDIRTEFDRE IDMGSLNPGK QLFKISMGM
301 YMGELVRLIL VKMAKAELLF QGKLSPELLT TGSFETKDVQ DIEEDKDGIE KAYQILMRLG
361 LNPLQEDCVA THRICQIVST RSASLCAATL AAVLWRIKEN KGEERLRSTI GVDGSVYKKH
421 PHFAKRLHKA VRLVPCDV RFLRSEDGSG KGAMVTAVA YRLAQHRRAR QKTLESCLKS
481 HEQLLEVKKR MKVEMEGGLS KETHAVAPVK MLPTYVCATP DGTEKGDFLA LDLGGTNFRV
541 LLVRVRNGKR RGVEMHMKIY SIPQEVHGT GEELFDHIVQ CIADFLEYMG MKGVSLPLGF
601 TFSFPCQONS LDQSILLKWT KGFKASGCEG EDVVTLLKEA IHRREEFDLD VVAVVNDTVG
661 TMMTTCGYEDP HCEVGLIVGT GSNACYMEEM RNVELVDGEE GRMCMNMEWG AFGDNGCLID
721 LRTVFDVAVD ELSLNPCKQR FEKISMGMYL GEIVRNILID FTKRGLLFRG RISERLKTRG
781 ISETKFLSQI ESDCLALLQV RAILRHLGLE STCDDSIIVK EVCTVVARRA AQLCGAGMAR
841 VVDKIRENRG LDNPKVTGV DGTLYKLPH FAKVMHETVR DLAPKCDVSF LESEDGSGKG
901 AALITAVACR IREACQR

FIGURE 3

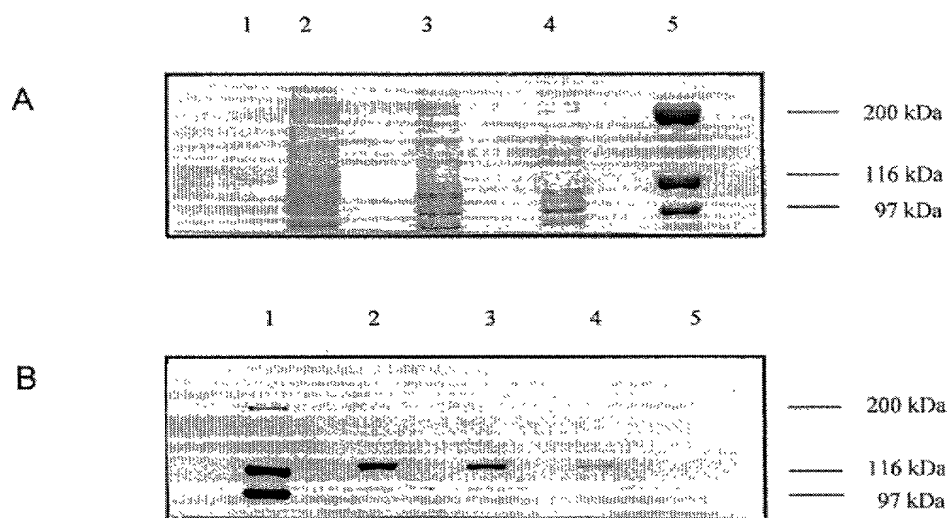


FIGURE 4

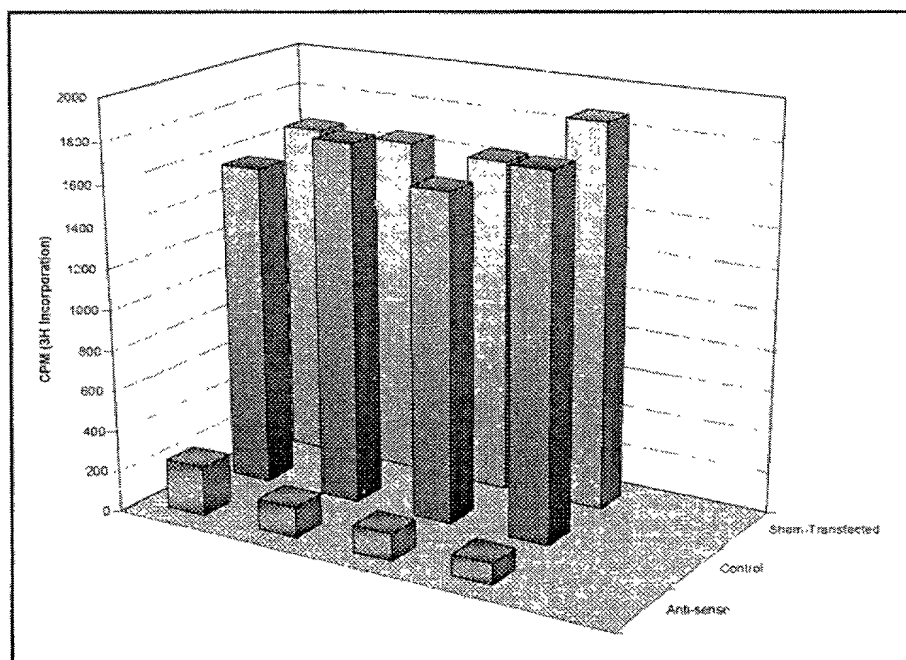


FIGURE 5

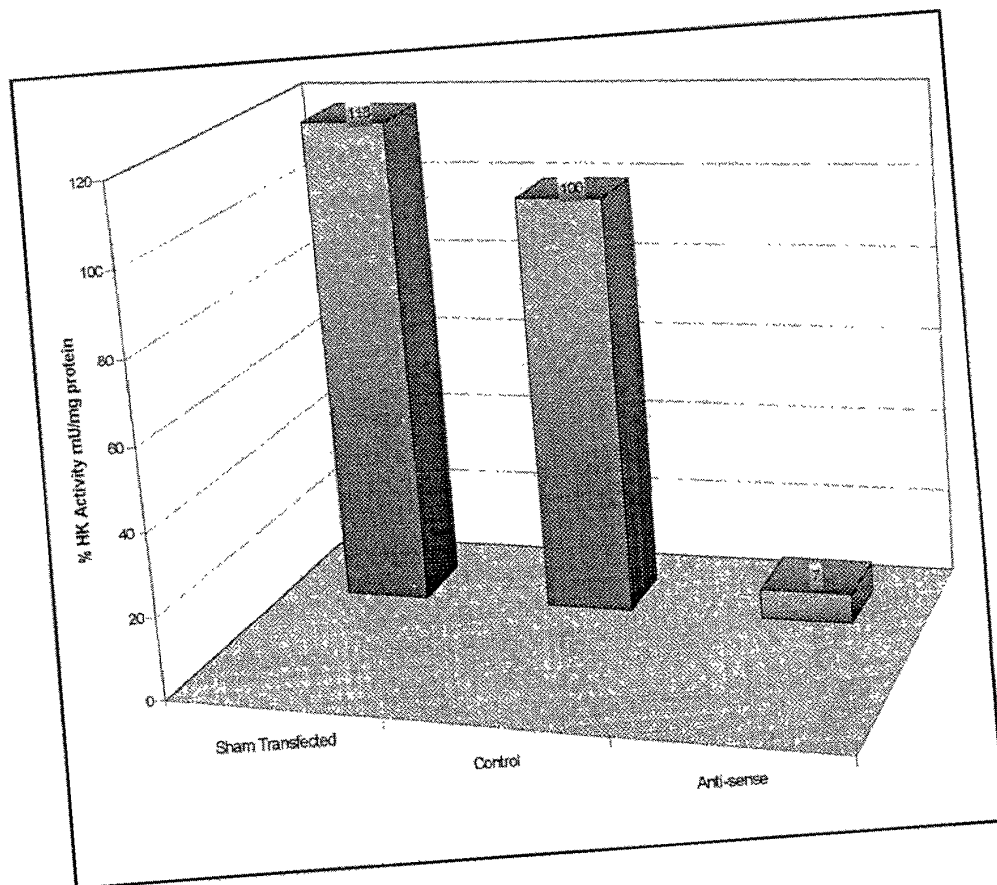


FIGURE 6

AF027179 *Rattus norvegicus* mutant type II hexokinase mRNA, complete cds

atgatcgcc	cgcatatgat	cgctgctta	ttcacggagc	tcaacccaaa	ccaagtgcag	61
aaggttgacc	aatttctcta	ccacatgcgt	ctctcagatg	agacccttct	ggagatttct	121
aggcggttcc	ggaaggagat	ggagaaaagg	ctaggagcta	ccacgcaccc	tacagcagct	181
gtgaaaatgt	tgcctacctt	tgtgaggcta	actccggatg	ggacagaaca	tggggagttc	241
ctggctctgg	atcttgagg	aaccaacttc	cgtgtgctcc	gagtaagggt	gacggacaat	301
ggcctccaga	gagtgaggat	ggagaaccag	atctacgcca	tccttgagga	catcatgcgg	361
ggcagtgga	cccagctgtt	tgaccacatc	gccgaatgcc	tggccaactt	catggacaag	421
ctacaaatca	aagagaagaa	gctccctctg	ggtttcacct	tctcgttccc	ctgccaccag	481
acaaaactgg	atgagagttt	tttggctctg	tggactaagg	ggttcaagtc	cagtggcgtg	541
gaaggcagag	atgtggtgga	cctgatccgg	aaggttatcc	agcgagagg	ggactttgac	601
attgacattg	tggccgtggt	gaatgacaca	gttgggacca	tgatgaactt	tggctatgat	661
gatcagaact	gcgagattgg	tctcattgtg	ggcactggca	gcaacgcctg	ctacatggag	721
gaaatgcgtc	atattgacat	ggtggaggga	gatgaggggc	gcatgtgcat	caacatggag	781
tggggagcct	ttggggacga	cgttacactc	aatgacatcc	gaaccgagtt	tgaccgagag	841
atcgacatgt	gctcgctgaa	ccctgggaag	cagctgtttg	agaagatgat	tagcgggatg	901
tacatggggg	agctggtcag	gctcatcctg	gtgaagatgg	ccaaggcaga	gctgttgttc	961
caagggaac	tcagcccaga	actccttacc	actggctcct	tcgagaccaa	agatgtctcg	1021
gatattgaag	aggataagga	tggaaatcag	aaggcctacc	aaatcctgat	gcgcctgggt	1081
ctgaatccat	tgcaggagga	ttgtgtggcc	acgcaccgaa	tctgccagat	tgtgtccacg	1141
cgctcggcca	gtctgtgctg	agccaccctg	gccgcggtgc	tgtggcgaa	caaagagaac	1201
aagggcgagg	agcgacttcg	ctccaccatc	ggtgtcgatg	gctccgtcta	caagaaacat	1261
ccccattttg	ccaagcgtct	ccataaggca	gtgaggaggc	tgggtgcccga	ctgtgatgtc	1321
cgtcttctcc	gctctgagga	tggcagcggc	aagggggctg	ctatggtgac	ggcgggtggc	1381
taccgtctgg	ctgaccaaca	ccgggcccgc	cagaagaccc	tggagtctct	gaagctgagc	1441
cacgagcagc	ttctggaggt	taagagaaga	atgaaggtgg	aaatggagca	gggtctgagc	1501
aaggagacgc	atgcggtcgc	ccctgtgaag	atgctgcca	cttacgtgtg	tgccactcca	1561
gatggcacag	agaaaggaga	cttcttggcc	ttggatcttg	gaggaacaaa	cttccgggtc	1621
ctgctggtgc	gtgtgcgtaa	tggcaagcgg	aggggcgtgg	agatgcataa	caagatctac	1681
tccatccac	aggaggttat	gcatggcact	ggggaagagc	tcttcgacca	cattgtccag	1741
tgcattgcgg	acttccttga	gtacatgggc	atgaaggcg	tgtccctgcc	tttgggtttc	1801
acattctcct	tcccttgcca	gcagaacagc	ctagaccaga	gcatoctcct	caagtggaca	1861
aagggattca	aggcatctgg	ctgcgaggtt	gaggtgtg	tcaccttgct	gaagggaagc	1921
attcacccgc	gagaggagtt	tgacctggat	gtggttgccg	tgggtgaatga	cacagttggg	1981
actatgatga	cttgtggcta	cgaagacctt	cactgtgaag	ttggcctcat	tgttggcacc	2041
ggaagcaacg	cctgctacat	ggaagagatg	cgtaatgtgg	agctggtgga	cggagaggag	2101
ggacggatgt	gtgtcaacat	ggagtgggga	gcatttgggg	acaatggctg	cctggatgac	2161
ttgcggaccg	tgtttgatgt	tgctgtggat	gagctttctc	tcaaccctgg	caaacagagg	2221
ttcgagaaga	tgatcagcgg	catgtacttg	ggagagattg	tgcgcaacat	tctcatcgat	2281
ttcacgaagc	gggggctgct	cttccgaggc	cgcactctcag	agcgctcaa	gacaagggga	2341
atctctgaaa	ctaagttcct	gtctcagata	gagagcgact	gcctagccct	gctacagggt	2401
cgtgccatcc	tgcgccacct	agggtggag	agcacgtg	atgacagcat	catcgtgaag	2461
gaggtgtgca	ctgtgggttg	ccggcgcgct	gcacagctct	gtggcgagg	catggccgcc	2521
gtagtggaca	agataagaga	gaaccgtggg	ctggacaacc	ccaaagtgc	agtggcgctg	2581
gacgggactc	tgtataagct	tcatcctcac	tttgccaagg	tcatgcatga	gacggtgaga	2641
gatctggctc	cgaaatgtga	cgtgtccttc	ctggaatccg	aggacggcag	tgggaaggga	2701
gcagctctca	tcactgccgt	ggcctgccgc	atccgggagg	ctgggcagag	atag	

FIGURE 7A

AF113968 Cloning vector pLXRN, complete sequence

```

gaattgctag caattgctag caattgctag caattcatac cagatcaccg aaaactgtcc 61
tccaaatgtg tccccctcac actcccaaact tgcgagggtt ctgcctotta gaccactcta 121
ccctattccc cacactcacc ggagccaaag ccgcggccct tccgtttctt tgcttttgaa 181
agaccccacc cgtagggtggc aagctagctt aagtaacgcc actttgcaag gcatggaaaa 241
atacataact gagaatagaa aagttcagat caaggtcagg aacaaagaaa cagctgaata 301
ccaaacagga tatctgtggt aagcggttcc tgccccggct cagggccaaag aacagatgag 361
acagctgagt gatgggccaa acaggatatt tgtggttaagc agttcctgcc ccggctcggg 421
gccaaagaaca gatgggtccc agatgcggtc cagccctcag cagtttctag tgaatcatca 481
gatgtttcca ggggtgcccc aggacctgaa aatgacctg taccttattt gaactaacca 541
atcagttcgc ttctcgcctt tgctcgcgcg cttccgctct ccgagctcaa taaaagagcc 601
cacaaccctt cactcggcgc gccagtcttc cgatagactg cgtcggcccg gtacccgtat 661
tcccaataaa gcctcttgct gtttgcattc gaatcgtggt ctgcgtgttc cttgggaggg 721
tctcctctga gtgattgact acccagcagc ggggtctttc atttgggggc tcgtccggga 781
tttgagagacc cctgcccagg gaccaccgag ccaccaccgg gaggttaagct ggcagcaaac 841
ttatctgtgt ctgtccgatt gtctagtgtc tatgtttgat gttatgcgcc tgcgtctgta 901
ctagttagct aactagctct gtatctggcg gaccctggtt ggaactgacg agttctgaac 961
acccggccgc aacctgga gacgtccag ggactttggg ggccgttttt gtggcccgac 1021
ctgaggaagg gattcgatgt ggaatccgac ccgctcagga tatgtggttc tggtaggaga 1081
cgagaacctt aaacagttcc cgcctccgct tgaatttttg ctttcgggtt ggaaccgaag 1141
ccgcgcgtct tgtctgctgc agcgtgcag catcgttctg tgttgtctct gtctgactgt 1201
gtttctgtat ttgtctgaaa attagggcca gactgttacc actcccttaa gtttgacctt 1261
aggctactgg aaagatgtcg agcggatcgc tcacaaccag tcggtagatg tcaagaagag 1321
acgttggggtt acctctgct gtgcagaatt gccaaccttt aacgtcggat ggcgcgaga 1381
cggcaccttt aaccgagacc tcatcaccga ggtaaagatc aaggctcttt caccctggcc 1441
gcattggacac ccagaccagg tccctacat cgtgacctgg gaagccttgg cttttgacct 1501
ccctccctgg gtcaagccct ttgtacacct taagcctccg cctcctcttc ctccatccgc 1561
cccgctctct ccccttgaac ctctcgttc gaccccgct cgatcctccc tttatccagc 1621
cctcactcct tctctaggcg ccggaattcg ttaactcgag gatccactag taacggccgc 1681
cagtggtgct gaattaattc gctgtctgcg agggccggct gttgggggtga gtactccctc 1741
tcaaaagcgg gcatgacttc tgcgctaaga ttgtcagttt ccaaaaaacga ggaggatttg 1801
atattcacct ggcccgcggt gatgcctttg aggggtggccg cgtccatctg gtcagaaaag 1861
acaatctttt tgttgtcaag cttgaggtgt ggcaggcttg agatctggcc atacacttga 1921
gtgacaatga catccacttt gcctttctct ccacagggtg tctcctccc cccccctaa 2041
aggctgatcg agcatgcac tagggcgggc aattcgcccc tctcctccc cccccctaa 2041
cgttactggc cgaagccgct tggataaagg ccggtgtgtg tttgtctata tgtgattttc 2101
caccatattg ccgtcttttg gcaatgtgag ggcccgaaa cctggccctg tcttcttgac 2161
gagcattcct aggggtcttt cccctctcgc caaaggaatg caaggtctgt tgaatgtcgt 2221
gaaggaagca gttcctctgg aagcttcttg aagacaaaca acgtctgtag cgaccctttg 2281
caggcagcgg aacccccac ctggcgacag gtgcctctgc ggccaaaagc cacgtgtata 2341
agatacacct gcaaaggcgg cacaacccca gtgccacgtt gtgagttgga tagttgtgga 2401
aagagtcaaa tggctctcct caagcgtagt caacaagggt ctgaaggatg ccagaagggt 2461
acccatttgt atgggaatct gatctggggc ctcggtgcac atgctttaca tgtgtttagt 2521
cgagggtaaa aaagctctag gcccccgaa ccacggggac gtggttttcc tttgaaaaac 2581
acgatgataa gcttgccaca accccgggat aattcctgca gccaatatgg gatcgcccat 2641
tgaacaagat ggattgcacg caggttctcc ggccgcttgg gtggagaggc tattcggcta 2701
tgactgggca caacagacaa tcggctgctc tgatgccgcc gtgttccggc tgcagcgca 2761
ggggcgcccc gttctttttg tcaagaccga cctgtccggt gccctgaatg aactgcagga 2821
cgaggcagcg cggtatcgt ggctggccac gacgggcgtt ccttgccgag ctgtgctcga 2881
cgttgtcact gaagcgggaa gggactggct gctattgggc gaagtgcggg ggcaggatct 2941
cctgtcatct cacttgctc ctgccagaa agtattccatc atggctgatg caatgcggcg 3001
gctgcatacg cttgatccgg ctacctgccc attcgaccac caagcgaaac atcgcatcga 3061
gcgagcacgt actcggtagg aagccggtct tgtcgatcag gatgatctgg acgaagagca 3121
tcaggggctc gcgccagcgg aactgttcgc caggctcaag gcgcgcatgc ccgacggcga 3181
ggatctcgtc gtgacctatg gcgatgcctg cttgccgaat atcatggtgg aaaatggccg 3241

```

FIGURE 7B

cttttctgga	ttcatcgact	gtggccggct	gggtgtggcg	gaccgctatc	aggacatagc	3301
gttggctacc	cgtgatattg	ctgaagagct	tggcggcgaa	tgggctgacc	gcttctcgt	3361
gctttacggt	atcgccgctc	ccgattcgca	gcgcacgccc	ttctatcgcc	ttcttgacga	3421
gttcttctga	gcgggactct	ggggttcgat	aaaataaaaag	attttattta	gtctccagaa	3481
aaagggggga	atgaaagacc	ccacctgtag	gtttggcaag	ctagcttaag	taacgccatt	3541
ttgcaaggca	tggaaaaata	cataactgag	aatagagaag	ttcagatcaa	ggtcaggaac	3601
agatggaaca	gctgaatatg	ggccaaacag	gatatctgtg	gtaagcagtt	cctgccccgg	3661
ctcagggcca	agaacagatg	gaacagctga	atatgggcca	aacaggatat	ctgtggtaag	3721
cagttcctgc	cccggctcag	ggccaagaac	agatggtccc	cagatgcggt	ccagccctca	3781
gcagtttcta	gagaaccatc	agatgtttcc	agggtgcccc	aaggacctga	aatgacctcg	3841
tgccttattt	gaactaacca	atcagttcgc	ttctcgcttc	tgttcgcgcg	cttctgctcc	3901
ccgagctcaa	taaaagagcc	cacaaccctt	cactcggggc	gccagtcctc	cgattgactg	3961
agtcgcccgg	gtaccctgtg	atccaataaa	ccctcttgca	gttgcacccg	acttgtggtc	4021
tcgctgttcc	ttgggagggg	ctcctctgag	tgattgacta	cccgtcagcg	ggggtctttc	4081
at ttgggggc	tcgtccggga	tcgggagacc	cctgcccagg	gaccaccgac	ccaccaccgg	4141
gaggtaaagt	ggctgcctcg	cgcgtttcgg	tgatgacggt	gaaaacctct	gacacatgca	4201
gctcccggag	acggtcacag	cttgtctgta	agcggatgcc	gggagcagac	aagcccgtca	4261
gggcgcgtca	gcggtgtttg	gcgggtgtcg	gggcgcagcc	atgaccaggt	cacgtagcga	4321
tagcggagtg	tatactggct	taactatgcy	gcacagagc	agattgtact	gagagtgcac	4381
catatgcggt	gtgaaatacc	gcacagatgc	gtaaggagaa	aataccgcat	caggcgctct	4441
tccgcttctc	cgctcactga	ctcgtgcgc	tcggtcgttc	ggctgcggcg	agcggtatca	4501
gctcactcaa	aggcggtaat	acggttatcc	acagaatcag	gggataacgc	aggaaagaac	4561
atgtgagcaa	aaggccagca	aaaggccagg	aaccgtaaaa	aggccgcggt	gctggcgttt	4621
ttccataggc	tccgcccccc	tgacgagcat	cacaaaaatc	gacgctcaag	tcagaggtgg	4681
cgaaaccoga	caggactata	aagataccag	gcgtttcccc	ctggaagctc	cctcgctgcg	4741
tctcctgttc	cgaccctgcc	gcttacccga	tacctgtccg	cctttctccc	ttcgggaagc	4801
gtggcgcttt	ctcatagctc	acgctgtagg	tatctcagtt	cgggtgtaggt	cgttcgctcc	4861
aagctgggct	gtgtgcacga	accccccggt	cagcccagacc	gctgcgcctt	atccggtaac	4921
tatcgtcttg	agtccaacc	ggtaagacac	gacttatcgc	cactggcagc	agccactggg	4981
aacaggatta	gcagagcgag	gatatgtagg	ggcgctacag	agttcttgaa	gtgggtggcct	5041
aactacggct	acactagaag	gacagtattt	ggatctgcg	ctctgctgaa	gccagttacc	5101
ttcggaaaaa	gagttggtag	ctcttgatcc	ggcaaacaaa	ccaccgctgg	tagcgggtgg	5161
ttttttgttt	gcaagcagca	gattacgcgc	agaaaaaaag	gatctcaaga	agatcctttg	5221
atcttttcta	cggggtctga	cgctcagtg	aacgaaaact	cacgttaagg	gattttgggtc	5281
atgagattat	caaaaaggat	cttcacctag	atccttttaa	attaaaaatg	aagttttaaa	5341
tcaatctaaa	gtatatatga	gtaaaacttg	tctgacagtt	accaatgctt	aatcagtgag	5401
gcacctatct	cagcgatctg	tctatttctg	tcacccatag	ttgcctgact	ccccgtcgtg	5461
tagataacta	cgatacggga	gggcttacca	tctggcccca	gtgctgcaat	gataccgcga	5521
gaccacgcgt	caccggctcc	agatttatca	gcaataaaacc	agccagccgg	aagggccgag	5581
cgcagaagtg	gtcctgcaac	tttatccgcc	tccatccagt	ctattaattg	ttgccgggaa	5641
gctagagtaa	gtagtctgcc	agttaatagt	ttgcgcaacg	ttgttgccat	tgctgcaggc	5701
atcgtgggtg	cacgctcgtc	gtttgggtatg	gcttcattca	gctccgggtc	ccaacgatca	5761
aggcgagtta	catgatcccc	catgtttgtg	aaaaaagcgg	ttagctcctt	cggctcctccg	5821
atcgtttgtca	gaagtaagtt	ggccgcagtg	ttatcactca	tggttatggc	agcactgcat	5881
aattctctta	ctgtcatgcc	atccgtaaga	tgcttttctg	tgactggtga	gtactcaacc	5941
aagtcattct	gagaatagtg	tatgcggcga	ccgagttgct	cttgccccgc	gtcaacacgg	6001
gataataccg	cgccacatag	cagaacttta	aaagtgtctca	tcattggaaa	acgttcttcg	

FIGURE 7C

```
6061 gggcgaaaac tctcaaggat cttaccgctg ttgagatcca gttcgatgta acccactcgt
6121 gcacccaact gatcttcagc atcttttact ttcaccagcg tttctgggtg agcaaaaaca
6181 ggaaggcaaa atgccgcaaa aaaggggaata agggcgacac ggaaatggtg aataactcata
6241 ctcttccttt ttcaatatta ttgaagcatt tatcagggtt attgtctcat gagcggatac
6301 atatttgaat gtatttagaa aaataaaca ataggggttc cgcgcacatt tccccgaaaa
6361 gtgccacctg acgtctaaga aaccattatt atcatgacat taacctataa aaataggcgt
6421 atcacgaggc ctttcgtct tcaa
```

FIGURE 8A

Accession Number NM_012734 for *Rattus norvegicus* Hexokinase 1 (Hk1), mRNA

```

cgccgatctg cgcgtggagg accactgctc accagggcta ctgaggagcc actggcccca 61
cacctgcttt tccgcatccc ccaccgtcag catgatcgcc gcgcaactac tggcctatta 121
cttcaccgag ctgaaggatg accaagtcaa aaagattgac aagtatctgt acgccatgcg 181
gctctctgat gagattctga tagatatcct gacacgattc aagaaagaga tgaagaatgg 241
cctctcccgg gattataatc caacagcctc cgtcaagatg ctgcccacct tcgtccgggtc 301
cattccggac ggctcagaaa aggggggattt cattgccctg gatctcggcg ggtcttcctt 361
tcgaatcctg cgggtgcagg tgaaccacga gaagaaccag aacgtcagca tggagtctga 421
gatctacgac accccagaga acatcgtgca tggcagtggg acccagcttt tcgatcatgt 481
cgctgactgc ctgggagact tcatggagaa aaagaagatc aaggacaaga agttaccctg 541
gggattcaca ttttccttcc cctgccgaca atccaagata gatgaggctg tactgatcac 601
gtggacaaaag cggttcaaag ccagtggcgt ggaaggagcg gatgtggtca agttgctgaa 661
taaagccatt aagaagcgag gggactatga tgctaacatt gtcgccgtgg tgaatgacac 721
agtagggacc atgatgacct gcggttatga tgaccaacag tgtgaagtcg gcctgatcat 781
tggcacaggc accaatgctt gctacatgga ggaactgcga cacatcgacc tgggtggaagg 841
cgacgagggg aggatgtgta ttaacacgga atggggagcc tttggggatg atgggtccct 901
ggaagacatc cgaaccgagt ttgacagaga gttagaccgt ggatctctca accctgggaa 961
gcagctgttc gagaagatgg tgagcggcat gtacatgggg gagctgggcc ggctaactct 1021
ggtgaagatg gccaaaggaag gcctcttatt cgaaggcgcc atcactccag agctgtcac 1081
gaggggaaaag ttcaacacta gtgacgtgtc cgccattgaa aaggataagg aaggcattca 1141
aaatgccaaag gaaatcttaa cccgcttggg agtggagccg tctgatgttg actgtgtgtc 1201
ggtccagcac atctgcacga tcgtctcctt ccgatcagcc aacctgggtg ccgccacgct 1261
cggtgccatc ttgaaccgcc tgcgggacaa caagggcaca ccacgcctgc ggaccacggt 1321
tggcgtggac ggttctctct acaagatgca cccacagtac tcccggcggc tccacaagac 1381
cctgagggcg ctggtgcctg actccgacgt ccgtttcctc ctctcagaga gtggcacggg 1441
caagggggcc gccatggtga cggcagtagc ctaccgcctg gctgagcagc accggcagat 1501
tgaggaaacc ctggcccaat tccgcctcag caagcagacg ctgatggagg tgaagaagag 1561
gctacggaca gagatggaaa tggggctgag gaaggagacc aacagcaaag ctactgtcaa 1621
aatgtgcctc tctttgtcc ggagcatccc ggaatgggact gaacacggtg acttcctggc 1681
cttggatcct ggaggaacga atttccgggt tctgctggta aagatccgca gtgggaaaaa 1741
gagaacagtg gaaatgcaca acaagatcta ctccattccc ctggaaatca tgcagggcac 1801
cggggatgag ctgtttgacc acatcgtctc ctgcatctct gacttcctgg actacatggg 1861
gatcaaaggc ccccgatgac ctctgggctt caccttctca tttccctgcc atcagacgaa 1921
cctggactgt ggaatcttga tctcatggac aaagggtttc aaagccactg actgtgaggg 1981
ccatgatgta gcctccttac tgagggatgc ggtgaagagg agagaggaat ttgacttggg 2041
tgtggtggct gtggtcaacg acaccgtggg caccatgatg acctgtgcgt atgaagaacc 2101
cacttgcgaa attggactca tcgtggggac gggcaccaat gcctgtaca tggaggagat 2161
gaagaatgtg gagatggtg aggggaacca gggccagatg tgcataca tggagtgggg 2221
cgcttcgggt gacaatgggt gtctggatga catcagaaca gactttgaca aagtgggtgga 2281
cgaatattct ctaaactctg ggaaacaaag gtttgagaaa atgatcagtg ggatgtacct 2341
gggtgagatc gtccgtaaca tctgattgta cttaccaag aaaggcttcc tcttccgggg 2401
acagatctcc gaaccactca agaccgagg catctttgag accaagtttc tctctcagat 2461
tgagagtgac cggtttagcg tgctccaggt gcgggccatc cttcagcagc tgggtttgaa 2521
cagcacgtgt gacgacagta tcctggtcaa gaccgtgtgt ggggtggtgt ccaagagggc 2581
ggctcagctg tgtggtgccg gcatggccgc cgtggtggaa aagatcagag agaacagagg 2641
cctagaccat ctgaatgtaa ctgtgggagc ggaatgggacg ctctacaaac ttcattccaca 2701
cttctccaga atcatgcacc aaactgtgaa ggaactgtca ccaaagtgtg ccgtgtcctt 2761
cctcctgtct gaagacggca gcggcaaggg gggccgctt atcacagctg tgggcgtgcg 2821
gctcagagga gacccttcca tcgcctaaaa gccaggatcc tcccagcccc cagcccgcga 2881
cccttccagc actcctctct agaaccgacg accacacccc cgtgttccac ccagcaagcc 2941
ctgggagacc cagccagcgc ccaactccgc gcagcagagg gaggaagggg accgcagtaa 3001
cggagcacca cgtagaatac caccagagc gcgtgtgctg ttgatctgat ctctcgctg 3061
gaccctaata ccctgccctg ccaactctga tgattcaagt tcgacctggc catgcattgc 3121

```

FIGURE 8B

```
ccatgagtga acgtagcggc accccgggtgc gtctactgca gatgtccagc taggaaagag 3181
ccccctctct tggacagtct tctgggccct tccaagccca tccgtggagt cggcctctcc 3241
ccccctctcc cccgtgtgaa gtgtgttata accagcagac actgccggac tcctgcccac 3301
aggggcgtgg cctgaaggcg gagtgtggac atggcactgc tgttccgttc cttccccctc 3361
ccagcaccgc cgcagcctg ccattccgtc tggatgtatc gatgccacag aattgtgaat 3421
tgtgtgtccg tccgtggagc cagtcctagc cacattattg acagtcttgc attttgtttt 3481
gtctcctggg ggtggggggtg gaggtggtag ggggtgcgcta aggtgggcag tcctgtggga 3541
gaacatcttg ctagaaggaa ccaaccacg aaacaacacc atcactggaa tttccatcgc 3601
ccgaattctt tagtgagcca ttgttgtacg tctagtaaac tttgtactga ttc
```